

[FeaturesScience](#)

# UP researchers develop low-cost air-quality monitor

By [BusinessMirror](#)  
December 27, 2020



The latest version of aerosol monitor unit developed by the University of the Philippines Diliman.

A low-cost, high-quality aerosol monitors to help find ways in minimizing air pollution in the cities was developed in the Philippines.

Spearheaded by Dr. Len Herald V. Lim of University of the Philippines Diliman (UPD), the Robust Optical Aerosol Monitor (Project ROAM) was initiated to measure particulate matter concentration in the air.

It provides crucial information for policies and programs for environmental protection.

“ROAM units use a different method in detecting particles that does not require the manufacture/fabrication of specialized parts typical of contemporary commercial instrumentation. This allows a much lower production cost, smaller maintenance requirement, and an exclusive research chain,” Lim said.

Lim and other researchers from UPD, in partnership with the Department of Science and Technology-Philippine Council for Industry, Energy and Emerging Technology Research and Development, have developed the project, the DOST-PCIEERD said in a news release.

The team has already produced 10 optical aerosol monitors. Four of them have been verified for performance through collocation experiments with aerosol equipment used by the Department of Environment and Natural Resources and its agency, the Environment management Bureau.

The remaining six optical aerosol monitors are being tested for performance and will be subject for stricter collocation experiments.

The ROAM team is currently exploring the creation of a spin-off company through DOST-PCIEERD's Funding Assistance for Spinoff and Translation of Research in Advancing Commercialization program to help advance the commercialization of their technology and bring this citizen science project to the community.

DOST-PCIEERD executive director Dr. Enrico C. Paringit expressed hope that the technology can be adopted by local government units who want to improve their area's air quality through scientific means, the news release said.

“As leader and partner in enabling innovations, we encourage our researchers for coming up with cutting-edge solutions to solve major environmental and societal issues. This technology is one significant stride in our path towards improving air quality. Now is a good time to cooperation with our innovators, adopt this solution to protect our future,” Paringit said.

<https://businessmirror.com.ph/2020/12/27/up-researchers-develop-low-cost-air-quality-monitor/>